SM matter fermion masses can be easily obtained from the superpotential - as they have only a good SUSY contribution. There will be an identical good SUSY contribution to the smatter masses, in addition to their soft-SUSY breaking contributions. In terms of the general formula the fermion mass terms have the form

$$\mathcal{L}_{\substack{f\,mass \\ yuk}} = 2\cdot\psi^a \frac{\partial^2 W(A)}{\partial A^a \partial A^b}\Big|_{vev} \psi^b + h.c.$$

(p.-53-)

$$= 2H_u\cdot q\, y_u\, u^c\cdot 2 + 2H_d\cdot q\, y_d\, d^c\cdot 2$$

$$+ 2H_d\cdot l\, y_e\, e^c\cdot 2 \quad + h.c.$$

$$= -\bar{u}_R \Gamma^{u\dagger} H_u q_L + \bar{q}_L \Gamma^u H_u^\dagger u_R$$

$$- \bar{d}_R \Gamma^{d\dagger} H_d q_L + \bar{q}_L \Gamma^d H_d^\dagger d_R$$

$$- \bar{e}_R \Gamma^{e\dagger} H_d l_L + \bar{l}_L \Gamma^e H_d^\dagger e_R$$

$\xrightarrow{\text{mass}}$ Terms

$$= +\bar{u}_R \Gamma^{u\dagger} \frac{v_u}{\sqrt{2}} u_L + \bar{u}_L \Gamma^u \frac{v_u}{\sqrt{2}} u_R$$

$$- \bar{d}_R \Gamma^{d\dagger} \frac{v_d}{\sqrt{2}} d_L - \bar{d}_L \Gamma^d \frac{v_d}{\sqrt{2}} d_R$$

$$- \bar{e}_R \Gamma^{e\dagger} \frac{v_d}{\sqrt{2}} e_L - \bar{e}_L \Gamma^e \frac{v_d}{\sqrt{2}} e_R$$

$$\Rightarrow \boxed{\begin{aligned} \mathcal{L}_{\substack{\text{matter}\\ \text{mass}}} &\equiv -\bar{u}_L M^u u_R - \bar{d}_L M^d d_R - \bar{e}_L M^e e_R \\ &\qquad + h.c. \\ \text{where} \quad M^u &\equiv -\Gamma^u \frac{v_u}{\sqrt{2}} = -\frac{1}{\sqrt{2}}\Gamma^u v \sin\beta \\ M^d &\equiv +\Gamma^d \frac{v_d}{\sqrt{2}} = +\frac{1}{\sqrt{2}}\Gamma^d v \cos\beta \\ M^e &\equiv +\Gamma^e \frac{v_d}{\sqrt{2}} = +\frac{1}{\sqrt{2}}\Gamma^e v \cos\beta \end{aligned}}$$

As in the SM these matrices can be diagonalized with the mixing given by the CKM matrix.

So far we have found the matter fermion masses — as in the SM & the gauge $W^\pm$, Z masses and the massless photon A_μ & gluons G_μ^m as SM usual.

Let's turn next to the scalar Higgs particle masses. There are $H_u^+, H_u^0, H_d^-, H_d^0$ — 4 complex scalar fields — 8 independent real fields. Recall the Higgs potential V_H pages -55- to -56-